

EXHIBIT 2A

Cabling Specifications

Generalized Local Area Network Cabling Specifications
Additional cabling information and requirements may be located
on Exhibit 1

Structured Copper Cabling

- All structured cabling shall be installed to meet the Telecommunications Industry Association (TIA) and Electronic Industries Alliance (EIA) category 6 and 6A industry standard. Provide a copy of the manufacturer warranty to the Tenant.
- Local Area Network (LAN) cabling shall be distributed to one or more tel/-data closets per floor as determined during design phase to maintain industry standard maximum recommended lengths.
- Green sheath cable shall be utilized during a new construction scenario. When adding to existing infrastructure the existing cable manufacturer shall be matched for consistency.
- All data closets shall have uniform lighting throughout, consistent air exchange or cooling to maintain 72-degree ambient temperature. Equipment thermal loads for each closet will be determined during design phase.
- All Wireless Access Points (WAPS) shall be cabled with category 6A cable, jacks and patch panels. Mounting of access points shall be included in scope of work and shall be attached to ceiling, walls or other location. Access point floor plan layout will be determined during design phase.
- Faceplates style will depend upon furniture compatibility. The Landlord's cable installation vendor will need to communicate with the Tenant to determine which faceplate will fit into the modular furniture. The faceplate color is to be determined by the Tenant.
- Network cables shall be supported by J-hooks or cable saddles spaced at 48" intervals above the dropped ceiling. Cable support apparatus may be connected to building steel or connected to wall structures.

- Cabling shall be routed to run along established walkways, where feasible to do so. This is to avoid working over the desks of individuals for the latter installation of additional cables.
- All LAN cables shall be tested to the established EIA/TIA standards for categories 6 and 6A. Paper and electronic test reports shall be provided to the Tenant for review and acceptance. At a minimum the report must provide the following:
 - Cable ID number
 - Near end and far end cross talk attenuation
 - Wire mapping
 - Cable length
- All cables shall be labeled at both ends of the cable with a corresponding cable identification number.
- Patch panels and data jacks shall be machine labeled with a cable ID number that meets industry standard.
- Patch cable color(s), length(s) and quantity will be determined during design phase.

Network Room Layout

- Network rooms shall be sized with a minimum of 36" clearance between equipment and any other fixed part of the Building structure (I.E., walls, door swing, support columns).
- Provide a minimum of 12" inch wide Telco-Style Cable Runway and all associated hardware for proper support, within all tel/data closets. Runway is required to properly route the cable entering the closets over to the network racks. The cable runway shall be installed over the network racks and be positioned in a manner as to provide 36 - 48 inches of space behind the network rack
- Provide network racks and wire management as determined during design phase. Racks shall be positively secured to the floor and the ladder rack to prevent any lateral movement.

Structured Fiber Optic Cabling

- As needed the landlord shall install **50-micron, armored fiber optic cable(s)** to connect the satellite closets with the main network closet. The cable is to be terminated on latch connector (LC) Unicam fiber tips and terminated in to be determined type housings in each network closet.
- All fiber optic cables will be labeled with wrap around labels at 20' intervals along the entire route. For example: 62.5 FM, 50-micron 5M, 8.3-micron single mode (FS) or hybrid multimode (FMS) fiber, labeling identifier should be denoted at each end of each fiber optic riser or tie cable.
- "As-built" drawings shall be provided by the Landlord, detailing the location of each fiber optic cable along with its corresponding Cable ID number.
- All fiber optic cables shall be tested and certified according to the EIA/TIA standards for the type of cable being installed. Paper and electronic test reports shall be provided to the Tenant for review and acceptance. At a minimum, the report must provide the following:
 - o Cable ID number
 - o Near end and far end cross talk attenuation
 - o Wire mapping
 - o Cable length

Network Room Electrical

In addition to electrical receptacles placed along walls according to the current version of the National Electrical Code (NEC), electrical service shall be installed for network equipment as determined during design phase, but in no case shall be less than the following:

- Two (2) 20 amp - double duplex power circuits (quad box) for each satellite network closet rack assembly. The receptacles shall be located at the base of the rack line up.
- Eight (8) 20 amp - double duplex power circuits (quad box) shall be provided for the rack array in the main network closet. The receptacles shall be located at the base of the rack line up.